

Noxious and Invasive Weed Update

Plant Protection and Weed Control

Spring 2015

Cooperative Weed Management Areas

Special points of interest:

- Field bindweed seeds can survive for more than 50 years in the soil before germinating.
- Many perennial plants not only store energy in their roots to grow new plants, they also have buds that will start new plant from pieces of the root that are broken off of the main root, resulting in even more plants than before.

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Sign up to receive the Noxious and Invasive Weed Update automatically via email at agriculture.ks.gov Cooperative Weed Management Areas, or CWMAs, are groups of landowners and land managers that meet regularly to share expertise and resources and organize activities to manage noxious and invasive weed species of common concern. Membership and participation are purely voluntary and without any threat of regulatory action. They can be self-organized or folded under the auspices of other organizations such as Conservation Districts. Extension Offices or County Weed Departments.

Some states have extensive networks of CWMAs that cover most if not all of



the state while others, like Kansas, are just getting introduced to the idea and only have a few.

The Southeast Kansas Weed Management Area is organized by the southeastern county weed directors. They hold regular planning meetings and educational workshops each year that are open to the public. The workshops are geared toward information

sharing and best management practices as they apply to controlling noxious and invasive weeds.

If you are interested in forming a CWMA in your area, which can be anywhere from a township to several counties in size, but don't know how, give Scott Marsh, KDA's State Weeds Specialist at 785-564-6697 or Ed Fields with the Southeast Kansas WMA at 620-724-4079 for more infor-

mation.
There are also resources available online.



"Banking" on Future Generations of Weeds

No, we are not planning on or hoping for weeds to grow into the future. The weeds themselves however, are doing just that.

You may have heard about the tens of thousands of seeds our noxious weeds can produce each year. What you may not have heard is that not all of those seeds germinate into new plants the next spring. Many of them, in some cases a majority of them, remain in the soil for many

years, even decades after they were produced. They are the weeds' back-up plan in case the germinating seeds are killed off by responsible, law-abiding landowners.

These dormant seeds in the soil are known collectively as the seed bank. When the soil gets warmer than usual, like when the growing plants die off or other favorable conditions occur, these seeds will germinate into new plants.

You may have noticed that after you have aggressively controlled every weed you could find, more seem to pop up out of nowhere; these are withdrawals from the seed bank.

The best way to combat the seed bank is to control your weed infestations early before too many generations of seeds are produced and to control the growing weeds before they flower and produce even more seeds.

Integrated Weed Management: Part 7 - Mechanical Control

The mechanical control of weeds is a relatively inexpensive method for controlling weeds; as long as it is effective on the weeds you have.

The majority of our noxious weeds are perennials, meaning their roots survive the winter full of energy and ready to produce new plants in the spring. Therefore, it is very difficult to control perennial weeds mechanically because it only works if you kill or remove the entire root system.

Types of mechanical control include digging, mowing, burning and tillage.

None of which will touch a

root more than a few inches deep.

Our biennial weeds on the other hand are very susceptible to mechanical controls. Musk and bull thistles can easily be killed by removing the plant and a couple of inches of the root. Since there are no reserves in the remaining roots, the plant will die. Just make sure you kill

them before they produce seed or you will have to start all over again next year.

While perennials are not easy to kill with mechanical methods, it is not impossible. If you let the plant grow in the spring, which uses up a lot of stored energy, but then prevent the plant from replacing that energy by removing it, over

time you will eventually starve the roots enough to kill them. Keep in mind that you will have to dig, mow, burn or till the same weeds every two weeks for five to ten years.

In summary, we encourage you to use mechanical controls on noxious weeds but don't waste your time or energy on any weeds other than musk or bull thistles.



Control Corner: Sensitive Crops

First of all, what is a sensitive crop? It is any commercial crop species that is likely to be economically damaged by herbicides, especially those that are more apt to drift as a vapor. It can also be an organic crop that cannot be subject to chemical herbicides, even in vapor form. Common sensitive crops in Kansas include grapes, tomatoes, cotton, fruit and others.

To help prevent these crops from being unintentionally injured or killed by herbicides, especially the hormone-type herbicides

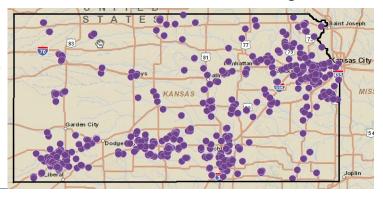
that they are most susceptible to, the Kansas Department of Agriculture has signed on as a partner with DriftWatch Inc., an online service that provides a place for producers of pesticide-sensitive specialty crops to map their crop locations and types.

If you are an applicator, either private or commercial, you can go on to the site, https://driftwatch.org/ to find out if there is a specialty crop grower nearby before spraying to take extra care to help protect these vulnerable crops. You may also choose to

apply a non-hormone type pesticide.

If you are a specialty crop grower and believe an herbicide application has illegally drifted onto your crop, call the KDA's pesticide division at (785) 564-6688 to report it as soon as possible. An inspector will come out to your fields to investigate the incident.

While herbicides are a very important part of weed control and traditional crop production, we should all be willing to work together for a common good.





Plant Protection and Weed Control

Any questions comments or article suggestions, please contact:

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Plant Protection and Weed Control staff work to ensure the health of the state's native and cultivated plants by excluding or controlling destructive pests, diseases and weeds. Staff examine and analyze pest conditions in crop fields, rangelands, greenhouses and nurseries. Action taken to control potential infestations of new pests, whether they are insects, plants diseases or weeds, is beneficial to the economy and the environment.

Our mission is to:

- Exclude or control harmful insects, plant diseases, and weeds:
- Ensure Kansas plants and plant products entering commerce are free from quarantined pests;
- Provide customers with inspection and certification services.

Invasive Species Spotlight

Italian plumeless thistle (Carduus pycnocephalus)

In a previous issue I spoke about the EDDMapS smart phone application that allows anyone to report invasive weeds at the click of a button. Well, someone took that to heart and reported what became the first sighting of a new and highly invasive weed in Kansas. The weed is the Italian plumeless thistle which is closely related to,

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and more invasive than, the

musk thistle. It was found on private land in Montgomery County.

Italian plumeless thistle is a smaller plant than musk thistle growing no more than 3 feet tall. It has more and longer spines under the flower head. The leaves

are spiny, smooth and green with white-woolly undersurfaces.

Because it was reported when there were only

about 20 plants, it should be able to be eradicated before it becomes a prob-

lem. However, if it does, or already has, escaped into new, unknown locations it will be important for whoever finds it to report it and control it as soon as possible.

There are a lot of control options available for Italian plumeless thistle. Because it is so closely related to musk thistle, any chemical controls that work on musk

thistle will also work on this species. Since it is an annual, most mechanical controls will work as long



as they are done before the plant produces seeds. While the biological controls that are currently helping to keep the musk thistle populations under control will also feed on Italian plumeless thistle, they should not be relied on to eradicate a species as aggressive as this one.